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10/706,809	11/12/2003	C. Allen Smith	KCX-62-DIV (13267.1)	6952

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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/706,809
Filing Date: November 12, 2003
Appellant(s): Smith et al

Neil M. Batavia
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/22/10 appealing from the Office action mailed 9/28/09

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1-12 and 17-22 are pending. Claims 1-8 are withdrawn. Claims 19-12, 17-22 are rejected and pending.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief

(6) Examiner's Statement of Grounds of Rejection

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appeal claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

4,722,973	Yamaoka et al	2-1988
5,382,631	Stehling et al	1-1995

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 9-12, 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka et al, U.S. Patent No. 4,722,973 in view of Stehling et al, U.S. Patent No. 5,382,631. Yamaoka discloses a thermoplastic elastomer composition comprising a blend of two polyolefins. One polyolefin is a hard (non-elastomeric) ethylene alpha olefin copolymer having a melt index of 0.01-100 g per cc and a density of 0.860-0.910 (see col. 6, lines 6-38) and the other is a soft (elastomeric) ethylene alpha olefin copolymer) having a density of 0.863 g per cc, (see example 1). The non-elastomeric component can be present in amounts of 10-90% by weight and the elastomeric component can be present in 90-10% by weight. Yamaoka et al teaches that the elastomeric component should have a peak temperature of 60-70 degrees C. See col. 7, lines 1-12. Yamaoka differs from the claimed invention because it does not specify that the composition can be formed into nonwovens and does not disclose the claimed

molecular weight distribution. Stehling discloses ethylene polymer blends which may comprise components having a narrow molecular distribution. See col. 6, lines 8-col. 9, line 7. Stehling teaches that the narrow molecular distribution of the blend improves the properties of the blends. Therefore, it would have been obvious to one of ordinary skill in the art to have employed polymers which had a narrow molecular weight distribution as taught by Stehling in the blend of Yamaoka, in order to produce ordinary having improved properties as taught by Stehling. Stehling discloses that ethylene polymer blends can be formed into meltspun, (i.e. spunbond) and meltblown fabrics. See col. 23, line 38-col. 24, line 48. Spunbond fabrics comprise continuous filaments. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the blend of Yamaoka to form nonwoven fabrics as taught by Stehling, in view of the art recognized suitability of elastomeric blends of ethylene polymers for use in forming such fabrics.

(10) Response to Argument

Appellant argues that Yamaoka teaches a density of the elastomeric component which is lower than the claimed density. However, Appellant claims a density of "*about* 0.865 g/cm^3 to *about* 0.889 g/cm^3". Yamaoka teaches a density of 0.863 in example 1. Yamaoka does not teach a criticality of the density or teach away from using a higher density. It is reasonable to expect that a range of "about" 0.865 to "about" 0.889 would encompass a value of 0.863 and/or that a polyolefin having a density value of 0.863 would have about the same properties as a polyolefin having a density value of about

0.865, where the materials are otherwise the same. Since the claims recite a range and use the term "about", it would be reasonable to expect that a value which varied by 0.002 would have about the same properties as a polyolefin component having a density value within the claimed range and that such a value would be encompassed by the claimed range. Appellant argues that a difference of 0.002 g/cm^3 is a significant amount, however, Appellant does not provide reasons in support of this. Appellant does not claim a range with a hard and fast end point but instead claims one with an end point of about 0.865 at one end of the range and about 0.889 at the other end of the range. Yamaoka teaches a density of 0.863 g/cm^3 and therefore, in the absence of evidence to show that a difference of 0.002 is significant, it is reasonable to expect a range of about 0.865-0.889 to encompass a value of 0.863 g/cm^3. Appellant argues that this with regard to the non elastomer component that Yamaoka teaches that using values outside the claimed density range of the non elastomeric component will have a deleterious effect on the final product. However, Yamaoka does not teach a particular range for the elastomeric component which is what is at issue. Yamaoka already teaches the claimed range for the non elastomeric component. Further, as set forth above, the use of the term "about" to describe the claimed range, indicates that the end points of the range for the elastomeric component are not hard and fast and include values above and below the recited endpoints. Since the density value taught in Yamaoka differs from 0.002 from the claimed end point, it is reasonable to expect that it would be encompassed by the claimed range. Appellant has not provided reasoning or

evidence to the contrary, which would establish that a value differing by 0.002 would not be encompassed by the claimed range.

Appellant also argues that Stehling teaches away from using rubbery polyolefins to make the nonwoven fabrics and that Yamaoka et al discloses a rubbery polyolefin. However, the passage referred to by Appellant at columns 2-3, does not negatively compare rubbery polyolefin blends to the blends of Stehling and does not include a teaching away from using a rubbery blend , but rather reviews various types of blends which are known in the art and states that while rubbery blends are known, there is also a need to make ethylene interpolymer blends with superior properties and in which the full advantages of blending may be realized. Further, Stehling teaches at cols 23 -24 that the polyethylene blends can be employed in any conventional operations and articles in which polyethylenes have been employed. Thus, Stehling teaches that it was known in the art to employ polyethylenes to form nonwoven fabrics. Yamaoka teaches a polyethylene polymer blend and therefore, it would have been obvious to have employed the polyethylene polymer blend of Yamaoka to form nonwovens, since such a use was conventionally known for polyethylenes and therefore, the person of ordinary skill in the art would have had a reasonable expectation of success in forming the blend of Yamaoka into a nonwoven fabric as taught by Stehling.

Appellant argues that if the crystalline polymers of Stehling were used they would skew the melting point range of the material of Yamaoka. However, the rejection does not suggest employing the particular polymer employed in Stehling, but rather states that since both Stehling and Yamaoka are drawn to polyolefin blends the

teaching of Stehling regarding the benefits of producing a blend having a narrow molecular weight distribution would have been pertinent to the invention of Yamaoka and therefore one of ordinary skill in the art would have been motivated to select the two components of the blend of Yamaoka so that they had a narrow molecular weight distribution. It is noted that Yamaoka teaches a blend which comprises an elastomeric and non elastomeric component, wherein the elastomeric component can be present in amounts as low as 10 percent. Therefore, Yamaoka is not limited to a material which is completely elastomeric or rubbery.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Elizabeth M. Cole/

Primary Examiner, Art Unit 1782

Conferees:

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1782

/Benjamin L. Utech/

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